

Notice of Allowability

Application No.

10/706,858

Examiner

(Nancy) Thanh-Nhan P. Nguyen

Applicant(s)

KIM ET AL.

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 4/28/2006.
2. ☒ The allowed claim(s) is/are 1,2,4-12 and 32-42.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

Allowable Subject Matter

Claims 1, 2, 4-12 and 32-42 are allowed.

Reasons for Allowance

Claims 1, 2, 4-12 and 32-42 are allowed since there is no prior art of record that teaches or suggests a liquid crystal comprising a relationship of various elements as claimed with the specific allowable subject matter cited in the following claims:

Claim 1:

- a compensation film and a first polarizer
- the first polarizer including a first supporting film
- the compensation film and the first supporting film have phase retardation characteristics
- a second polarizer including a second supporting, wherein the second supporting film has phase retardation characteristics
- the phase retardation of the compensation film ranges about 80 nm to about 100 nm in the vertical direction, and the phase retardation of the first supporting film ranges about 50 nm to about 60 nm in the vertical direction

Claim 12:

- a compensation film
- a first polarizer having a first supporting film
- a second polarizer having a second supporting film

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- the first supporting film, the second supporting film and the compensation film have phase retardation characteristics
- the phase retardation of the first supporting film combined with the compensation film ranges from about 130 nm to about 160 nm in the vertical direction

Claim 32: A method of forming panels in a liquid crystal display device, comprising

- positioning first and second panels to face each other
- disposing a compensation film and a first polarizer on the first panel, wherein the first polarizer includes a first supporting film, and the compensation film and the first supporting film have phase retardation characteristics
- disposing a second polarizer on the second panel, wherein the second polarizer comprises a second supporting film, and the second polarizer has phase retardation characteristics
- wherein the phase retardation of the compensation film ranges about 40 nm to about 60 nm in the horizontal direction and the phase retardation of the first supporting film ranges about 0 nm to about 5 nm in the horizontal direction

Claims 2 and 4-11 are allowed since they depend on the allowed claim 1.

Claims 33-42 are allowed since they depend on the allowed claim 32.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Terashita et al (U.S. Patent No. 6,628,359) discloses a liquid crystal comprising first polarizer and first compensating film formed on first substrate,

and second polarizer and second compensating film formed on second substrate, wherein the first polarizer comprising first supporting film and the second polarizer comprising second supporting film, and the first supporting film and the second supporting films having retardation characteristics.

Kuzuhara et al (U.S. Patent Application Publication No. 2003/0156235) discloses a polarizer comprising a supporting film (a mixed fatty acid cellulose ester film) having retardation in vertical direction ranges from 60-300 nm.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to (Nancy) Thanh-Nhan P. Nguyen whose telephone number is 571-272-1673. The examiner can normally be reached on Monday to Friday.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached on 571-272-1787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

(Nancy) Thanh-Nhan P Nguyen
Examiner
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HUYEN NGO
PRIMARY EXAMINER